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10/568,154

02/13/2006

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EXAMINER

FOGARTY, CAITLIN ANNE

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

06/26/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/568,154             | KIMURA ET AL.       |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | CAITLIN FOGARTY        | 1793                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 13 March 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 24-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 24-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Status of Claims***

1. Claims 24 – 35 are new and are pending for examination. Claims 1 – 23 have been cancelled.

### ***Status of Previous Rejections***

2. The following rejections have been withdrawn in view of the amendment filed on March 13, 2008:

- Claims 1 – 12 under 35 U.S.C. 112 second paragraph as being indefinite.
- Claims 1 – 12 under 35 U.S.C. 103(a) as being unpatentable over Kushida et al. (US 6,379,821 B2).
- Claims 1 – 12 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 25 – 36 of copending Application No. 10/576,885.

### ***Claim Rejections - 35 USC § 103***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 24 – 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kushida et al. (US 6,379,821) in view of the *ASM Handbook*.

With respect to instant claim 24, the abstract and col. 3 line 3 – col. 4 line 17 of Kushida teach a highly corrosion resistant high strength stainless steel pipe for linepipe with a clearly overlapping composition as shown in the table below.

| Element         | Instant Claim 1<br>(mass %) | Kushida et al.<br>(mass %) | Overlapping Range<br>(mass %) |
|-----------------|-----------------------------|----------------------------|-------------------------------|
| C               | 0.005 – 0.05                | $\leq 0.05$                | 0.005 – 0.05                  |
| Si              | 0.05 – 0.5                  | 0.01 – 1                   | 0.05 – 0.5                    |
| Mn              | 0.2 – 1.8                   | 0.05 – 2                   | 0.2 – 1.8                     |
| P               | $\leq 0.03$                 | $\leq 0.025$               | $\leq 0.025$                  |
| S               | $\leq 0.005$                | $\leq 0.01$                | $\leq 0.005$                  |
| Cr              | 15.5 – 18                   | 9 – 20                     | 15.5 – 18                     |
| Ni              | 1.5 – 5                     | 0 – 9                      | 1.5 – 5                       |
| Mo              | 1 – 3.5                     | 0 – 5                      | 1 – 3.5                       |
| V               | 0.02 – 0.2                  | 0 – 0.5                    | 0.02 – 0.2                    |
| N               | 0.01 – 0.15                 | $\leq 0.02$                | 0.01 – 0.02                   |
| O               | $\leq 0.006$                | $\leq 0.01$                | $\leq 0.006$                  |
| Fe + impurities | Balance                     | Balance                    | Balance                       |

Kushida does not specifically teach equations (1) - (3), however, since the compositional ranges of the stainless steel of Kushida overlap with those recited in instant claim 24 the equations would be satisfied by the stainless steel of Kushida. Also, it is well settled that there is no invention in the discovery of a general formula if it covers a composition described in the prior art, *In re Cooper and Foley* 1943 C.D. 357, 553 O.G. 177; 57 USPQ 117, *Taklatwalla v. Marburg*, 620 O.G. 685, 1949 C.D. 77, and *In re Pilling*, 403 O.G. 513, 44 F(2) 878, 1931 C.D. 75. In the absence of evidence to the contrary, the selection of the proportions of elements would appear to require no more than routine investigation by those ordinary skilled in the art. *In re Austin, et al.*, 149 USPQ 685, 688.

Kushida differs from claim 24 because it does not teach that the high strength stainless steel pipe is a seamless pipe, but rather that it is a welded pipe. However, it would have been obvious to one of ordinary skill in the art that the stainless steel of Kushida is capable of being formed into a seamless pipe or a welded pipe. It is well known in the art, as evidenced in Volume 1 of the 1990 10th Edition *ASM Handbook* p.

852 – 853, that the two most common types of pipes are welded and seamless pipes and the method of making either type is also well known. Kushida also does not teach that the stainless steel pipe is for use in oil wells. However, it is an intended use and is not considered a claim limitation. See MPEP 211.02 II.

In regards to instant claim 25, col. 3 line 3 – col. 4 line 17 of Kushida teaches that the stainless steel may also contain 0.001 – 0.1 mass% Al which encompasses the range of claim 25.

Instant claims 26 – 28 further limit the compositions of C, Cr, and Mo. However, the stainless steel composition taught by Kushida still overlaps with the ranges recited in instant claims 26 – 28.

Regarding instant claims 29 and 30, col. 3 line 3 - col. 4 line 17 of Kushida teaches that the stainless steel may also contain 0 – 5 mass% Cu which encompasses the recited ranges of claims 29 and 30.

With respect to instant claim 31, col. 3 line 3 - col. 4 line 17 of Kushida discloses that the stainless steel may also contain  $\leq 0.1$  mass% Ti, 0 – 0.5 mass% Zr, and 0 – 6 mass% W which overlap with the ranges recited in claim 31.

In regards to instant claim 32, col. 3 line 3 - col. 4 line 17 of Kushida teaches that the stainless steel may also contain 0 – 0.5 mass% Ca which encloses the recited range of claim 32.

Since the claimed compositional ranges of instant claims 24 – 32 either overlap or are within the ranges disclosed by Kushida, a prima facie case of obviousness exists. See MPEP 2144.05. It would have been obvious to one of ordinary skill in the art at the

time the invention was made to select the claimed stainless steel pipe alloy composition from the stainless steel pipe alloy composition disclosed by Kushida because Kushida teaches the same utility (i.e. pipes to hold oil) in the whole disclosed range.

Regarding instant claims 33 and 34, col. 3 lines 46 – 52 of Kushida teach that the stainless steel pipe is constituted of 55-90% martensite (primary phase) and 10-45% ferrite phase. These ranges overlap with the recited ranges of claims 33 and 34.

With respect to instant claim 35, Kushida does not teach that the stainless steel pipe contains 30% or less of an austenite phase. However, the austenite phase range recited in claim 35 includes 0% and therefore the stainless steel of Kushida is within the claimed range.

### ***Double Patenting***

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 24 – 35 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 25, 27 – 29, 31, and 34 – 36 of copending Application No. 10/576,885. Although the conflicting claims are not identical, they are not patentably distinct from each other because the composition of the high strength stainless steel seamless pipe recited in Application No. 10/576,885 overlaps in scope with the composition of the stainless steel seamless pipe recited in claims 24 – 35 of the instant application. It would have been obvious to one of ordinary skill in the art at the time the invention was made to select the claimed stainless steel pipe alloy composition from the stainless steel pipe alloy composition disclosed by 10/576,885 because 10/576,885 teaches the same utility (i.e. pipes to hold oil) in the whole disclosed range.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Response to Arguments***

7. Applicant's arguments filed March 13, 2008 related to the reference Kushida have been fully considered but they are not persuasive.

Arguments are summarized as follows:

- a. The claimed “seamless” pipes do not include seam welds and thus the Applicants’ pipes and the Kushida pipes are quite different. Also, the entire structure of the claimed pipes is homogeneous.
- b. High strength materials which the Applicants obtain are unable to be produced by Kushida. Pipes produced by cold bending a plate, as in Kushida,

cannot be used for high strength pipes for use in oil wells to which the Applicants' pipes are directed.

c. Kushida is non-enabling with respect to providing teachings or guidance to those skilled in the art as to how to achieve high strength steel seamless pipes having a yield strength of 654 MPa or more.

Examiner's responses are as follows:

- a. See the 35 U.S.C. 103(a) rejection above.
- b. The instant claims do not define the term "high strength" by using limitations such as grade or yield strength, for example, and therefore the high strength stainless steel of Kushida satisfies the instant claim limitations. Also, the method by which the stainless steel product is made is not recited in the claims and is therefore not a claim limitation.
- c. Kushida is not required to teach how to achieve high strength steel seamless pipes having a yield strength of 654 MPa or more because it is not an instant claim limitation.

### ***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).



A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CAITLIN FOGARTY whose telephone number is (571)270-3589. The examiner can normally be reached on Monday - Friday 8:00 AM - 5:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1793

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Roy King/  
Supervisory Patent Examiner, Art  
Unit 1793

CF